



# Typical Environmental Permitting Requirements for the Construction & Operation of a Manufacturing Facility

The Kentucky Department for Environmental Protection, located within the Environmental and Public Protection Cabinet, implements programs that control air emissions, water discharges, water withdrawals, and solid, special and hazardous waste disposal. Many of these programs require that facilities and operators obtain permits or authorizations prior to engaging in these activities. The specific environmental regulations and permits that could apply to the construction and operation of a manufacturing facility vary depending on the specific location and activities of the facility. This document highlights only the major permits and authorizations issued by the department that typically pertain to a manufacturing facility. It does not cover every permit or authorization issued by the department, and individuals are encouraged to contact the department to ensure that they receive a comprehensive understanding of all of the permits or authorizations that may apply to their unique circumstances.

## AIR PERMITS

A Division for Air Quality (DAQ) permit is required for the construction and operation of an air contaminant source and its air pollution control equipment, if the source's emissions will be above certain threshold levels. An "air contaminant or air pollutant" includes smoke, dust, soot, carbon or any particulate matter, radioactive matter, noxious acid, fumes, gases, odor, vapor or any combination thereof.

The owner of an air contaminant source may conduct some activities prior to receiving a DAQ permit. These allowable activities are: planning, ordering equipment and materials, site-clearing, grading and on-site storage of equipment and materials. All on-site activities of a permanent nature are prohibited until a permit is received. Prohibited on-site activities prior to issuance of a DAQ permit include installation of building supports and foundations, paving, laying of underground pipe work, construction of permanent storage structures, and activities of a similar nature.

The time frame for review and issuance of a DAQ permit (which covers the construction and operation of the source) is dependent on the complexity and amount of emissions from the source. If a new source will emit:

- **Less than 10 tons/year of a regulated air pollutant** (particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds or carbon monoxide), or less than 2 tons of a hazardous air pollutant, or less than 5 tons of combined hazardous air pollutants, there are **no permitting or registration requirements**.

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- **10-25 tons/year of a regulated air pollutant**, or 2 tons/year of a hazardous air pollutant, or 5 tons/year of combined hazardous air pollutants, **registration**, using simplified form DEP 7039, is required prior to construction.
- **25-100 tons/year of a regulated air pollutant**, or less than 10 tons of a hazardous air pollutant or less than 25 tons of combined hazardous air pollutants, is considered a **minor source**, subject to permitting if there are applicable requirements. The regulatory time frame for review and permitting decision is **60 days** after an application is determined **complete**. The actual time frame will vary depending on application complexity and deficiencies; however, the goal is to issue minor source permits within **60 days** after application **receipt**.
- **100 tons/year of a regulated air pollutant**, or 10 tons/year of a hazardous air pollutant, or 25 tons of combined hazardous air pollutants, is considered a **major source**, subject to permitting requirements for construction and operation. The time frame for review and issuance of major source applications will be **150 days** after an application is determined **complete**. The actual time frame will vary depending on application complexity and deficiencies; however, the goal is to issue major source permits within **150 days** after application **receipt**.
- **Prevention of Significant Deterioration (PSD) Review** –If the source will emit over 250 tons per year, or will emit 100 tons per year or more and is listed in 401 KAR 51:017, the applicant may be required to submit up to a year of on-site ambient air quality monitoring data prior to application submittal and the maximum permit processing time would be **12 months** once a complete application is received (public hearing may be held). PSD permits are typically issued within **6-9 months** after application completeness.
- Some sources may accept limitations on their potential to emit in order to avoid major source status (conditional major) or PSD status (synthetic minor). The time frame to review and make a permitting decision for conditional major sources is **60 days** after receipt of a complete application. The time frame for synthetic minor sources is **150 days**.

The Division of Air Quality's web site is: <http://www.air.ky.gov/>

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## WATER PERMITS

The Division of Water regulates a variety of activities that can result in impacts to Kentucky's water resources. This includes wastewater discharges, construction, stormwater controls, water withdrawal, and stream and wetland mitigation. Permits and authorizations that will typically be required of a manufacturing facility may include the following:

**Wastewater Discharges** - If wastewater is discharged into a municipal system, the company would need to meet pretreatment limits set by the local authority accepting the wastewater and obtain approvals or permits from that authority prior to discharging. If the facility will be discharging directly into a water body in the state, a permit would be required for the discharge of wastewater from the point source (KPDES permit). Discharge permit time for review and issuance is 180 days. A wastewater construction permit is also needed for sanitary treatment facilities.

**Storm Water Discharges** - The state storm water permitting guidelines are similar to the federal guidelines. At least two days prior to construction on a site that will disturb one or more acres, a Notice of Intent form must be submitted to the Division of Water. Certain industrial facilities, identified by the Standard Industrial Classification (SIC) codes, are required to submit an application for a storm water permit prior to operation. Many new facilities are eligible for a general permit. However, a general permit is not applicable if the storm water is also process water, and in certain circumstances to protect water quality. Facilities who are required to obtain an individual Kentucky Pollutant Discharge Elimination System permit (KPDES permit) should include storm water as part of the KPDES permit rather than obtain a general permit. If a facility is located within a political boundary that has a Municipal Separate Storm Sewer System (MS4), there may be additional requirements per local ordinances. The MS4 operator should be contacted in order to verify any local requirements.

**Floodplain and Wetlands** - A Division of Water floodplain construction permit is required prior to the construction, reconstruction, and relocation or improvement of any dam, embankment, levee, dike, bridge, fill or other obstruction across or along any stream, or in the floodway of any stream. A permit is also required to fill any area with earth, debris, or any other material, or raise the level of any area in a manner, or place a building, barrier or obstruction of any sort on any area located adjacent to a river or stream, or in the floodway of the stream, so that such filling, raising or obstruction would in any way affect the flow of water in the channel or in the floodway of the stream. The application for a floodplain construction permit should be submitted at least twenty days prior to the start of construction. Also, if the facility will disturb at least 200 feet of stream or impact a wetland, additional water quality certifications and permits must be obtained prior to construction. These applications must be submitted 30 days prior to construction.

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**Groundwater Protection** - A groundwater protection plan must be maintained at the facility if the facility handles pesticides, hazardous or solid wastes, bulk quantities of raw material and other potentially polluting substances.

**Water Withdrawals** - If raw water, at a rate of 10,000 gallons per day or more is to be withdrawn from surface water or groundwater, a withdrawal permit must be obtained. The time frame to review and issue a withdrawal permit is usually 90 days. If a well is to be drilled, a Kentucky certified water well driller must be used. However, there are no permitting requirements to drill a well.

**Drinking Water** - A manufacturing facility does not need to obtain a drinking water authorization from the Division of Water unless they treat their own water and meet the definition of a public water system. However, prior to beginning construction, a facility should ensure that their anticipated drinking water source has adequate capacity and infrastructure available to deliver sufficient water to the facility. If it does not, the facility may need to work with the public water system and the Division of Water to ensure that drinking water service can be made available.

The Division of Water's web site is: <http://www.water.ky.gov/>

### WASTE MANAGEMENT

The Division of Waste Management implements programs that ensure the proper handling, storage, and disposal of Kentucky's solid and hazardous wastes.

**Solid and Special Wastes** - All solid and special wastes must be disposed at a site permitted by the Division of Waste Management if the disposal location is in the Commonwealth of Kentucky. Off site disposal does not require a permit from the Division of Waste Management. To arrange off site disposal, contact a commercial waste hauling company. The hauling company must have a solid waste transporters permit from the Transportation Cabinet and the destination landfill must have a solid waste disposal permit from Division of Waste Management.

**Hazardous Waste** - Hazardous waste generators are required to register with the Division of Waste Management if they generate more than 220 pounds of hazardous waste per month. Any facility that treats, stores or disposes hazardous waste on-site must receive a permit issued by the Division of Waste Management. The requirements for generators of hazardous wastes are the same as the U. S. EPA, except that:

- Neutralization of alkaline wastes in an enclosure is exempt from permitting;

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- There are various registration and annual fees depending on the number of waste streams; and
- Annual Hazardous Waste Reports are required as opposed to US EPA Biannual Reports

Some industries choose to permit a container storage or tank storage facility. This allows a generator to hold containers more than 180 days. The time frame to review Part A of the permit application is 45 days. For Part B of the application, the review time frame is 180-365 days, depending on the type of facility.

**Underground Storage Tanks** – All underground storage tanks must be registered with the Division of Waste Management within 30 days of beginning their use.

The Division of Waste Management's web site is: <http://www.waste.ky.gov/>

### PERMITTING ASSISTANCE IS AVAILABLE

The Division of Compliance Assistance assists businesses, individuals and organizations comply with environmental requirements. The division can provide assistance through their toll free compliance assistance hotline at (800) 926-8111. In addition, division staff are available to provide on-site assistance and training. Questions regarding permits can be addressed to the Division of Compliance Assistance.

The Division of Compliance Assistance's web site is: <http://www.dca.ky.gov/>

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